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| 09/931,276  | 08/16/2001  | H. Barteld Van Rees  | RTN-122PUS           | 2017             |
| 22494   | 7590        | 04/07/2005           | EXAMINER             |                  |
| DALY, CROWLEY, MOFFORD & DURKEE, LLP<br>SUITE 101<br>275 TURNPIKE STREET<br>CANTON, MA 02021-2310 |             |                      | GOINS, DAVETTA WOODS |                  |
|   |             |                      | ART UNIT             | PAPER NUMBER     |
|   |             |                      | 2632                 |                  |

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/931,276

Applicant(s)

VAN REES ET AL.

Examiner

Davetta W. Goins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 5, 8, 9, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gauthier et al. (US Pat. 5,303,205) in view of Schwarz et al. (US Pat. 6,508,325 B1).

In reference to claims 1, 8, Gauthier discloses the claimed side object detection radar transceiver, which is met by ultrasonic transceivers 60 placed alongside of the rear and “side” of the vehicle (col. 6, lines 42-55 and Figure 2). Although ultrasonic transceivers are described, other ranging systems such as radar may be used (col. 10, lines 55-65). Although Gauthier does not specifically disclose the claimed radar system having a plurality of radar beams; and attachment means coupled to the side object detection radar transceiver for portably attaching the side object detection radar transceiver to a vehicle, he does disclose that the a vehicular distance measurement system comprising one or more ultrasonic transceivers 60, a connection box 80, a mirror display system 40, such that the entire system can be mounted to the vehicle. Each of the items of the system are connected in series or in “daisy chained” by cables 66 (col. 6, lines 16-68; col. 7, lines 1-25, Figure 3). Schwarz discloses an assembly 10 including a carrier 18 to be mounted to the front or rear ends of the vehicle and can be mounted to the “sides” or portions of

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the sides and ends of the vehicle (col. 2, lines 43-58). The carrier 18 includes one or a plurality of sensors 26 that are radar-based collision avoidance sensors (col. 3, lines 1-35). Since both Gauthier and Schwarz disclose object detection sensors for a vehicle, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of having a plurality of radar beams, and attachment means coupled to the side object detection radar transceiver, as disclosed by Schwartz, with the system of Gauthier for portability as well as allowing the driver to place the detecting system on any part of the vehicle that will allow the driver to detect nearby objects around the vehicle.

In reference to claims 2, 4, 5, 9, 13, Gauthier discloses the claimed radar display coupled to the side object detection radar transceiver, which is met by a mirror display system 40, on the outside side rearview mirror, is connected to the ultrasonic transceivers 60 via cables 66 (col. 6, lines 5-68, Figure 1).

In reference to claim 15, Gauthier discloses the claimed object detection radar transceiver adapted to detect objects in a predetermined detection zone to the side of a vehicle, and not to objects outside of a predetermined detection zone, which is met by the computed distance is determined to be within a display range corresponding to a threshold distance configured by microprocessor 102 to avoid spurious warning indications to the operator (col. 10, lines 1-25).

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3. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gauthier in view of Schwartz et al. as applied to claim 1 above, and further in view of Marcus et al. (US Pat. 6,124,647).

In reference to claims 3, 7, although Gauthier does not specifically disclose the claimed radar display is portably attached to the interior of the vehicle, he does disclose a mirror display system 40, on the outside side rearview mirror, is connected to the ultrasonic transceivers 60 via cables 66 (col. 6, lines 5-68, Figure 1). Marcus discloses an information display located in the interior or exterior of the vehicle, the display including a CCD camera for using radar to detect rear proximity approaching vehicles (col. 5, lines 29-57). Since both Gauthier and Marcus disclose radar detecting devices mounted in vehicles as well as displays connected to the radar detecting devices, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of a radar display attached to the interior of the vehicle, as disclosed by Marcus, with the system of Gauthier, to maximize both forward and rearward fields of view to the driver and other drivers on the road and provide a display that will be protected by being placed on the inside of the vehicle.

4. Claims 6, 11, 12, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gauthier in view of Schwarz et al. as applied to claim 1 above, and further in view of Schofield et al (US Pat. 5,786,772).

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In reference to claims 6, 11, 12, although Gauthier does not specifically disclose the claimed radar display disposed upon the radar transceiver, he does disclose a mirror display system 40, on the outside side rearview mirror, is connected to the ultrasonic transceivers 60 via cables 66 (col. 6, lines 5-68, Figure 1). Schofield discloses a vehicle blind spot detection display system that includes a radar-based blind spot detection or ultrasonic detection system located in the side rearview mirrors; after detecting an object, a first indicator assembly 28 is illuminated to indicate to the driver that an object has been detected by the detection system (col. 3, lines 1-45; Figure 2). Since both Gauthier and Schofield disclose a display that's attached to the radar sensor, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of placing the display unit with the side radar monitoring detector, as disclosed by Schofield, with the system of Gauthier, to ensure that the other pedestrians/drivers as well as the driver of the vehicle with the detection system are given an indication of the detected objects by the system.

In reference to claim 14, Gauthier discloses the claimed radar display coupled to the side object detection radar transceiver, which is met by a mirror display system 40, on the outside side rearview mirror, is connected to the ultrasonic transceivers 60 via cables 66 (col. 6, lines 5-68, Figure 1).

In reference to claim 16, Gauthier does not specifically disclose the claimed predetermined detection zone to the side of the vehicle is associated with a vehicle blind spot. Schofield discloses a radar sensor including a blind spot detection system 18 made up of blind spot detector

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20 and blind spot detection display system 22 (col. 2, lines 57-67; col. 3, lines 1-45). Since both Gauthier and Schofield disclose a display that's attached to the radar sensor, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of placing blind spot detectors, as disclosed by Schofield, with the system of Gauthier, to ensure that the radar transceiver device is capable of detecting objects that are in a view not easily seen by the driver and provide a warning signal to the driver after the detection has been made.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gauthier in view of Schwartz et al. in view of Schofield as applied to claim 6 above, and further in view of Marcus et al..

In reference to claim 10, neither Gauthier nor Schofield disclose the claimed radar transceiver is portably attached to the interior of the vehicle. However, Gauthier discloses a mirror display system 40, on the outside side rearview mirror, is connected to the ultrasonic transceivers 60 via cables 66 (col. 6, lines 5-68, Figure 1). Schofield discloses a vehicle blind spot detection display system that includes a radar-based blind spot detection or ultrasonic detection system located in the side rearview mirrors; after detecting an object, a first indicator assembly 28 is illuminated to indicate to the driver that an object has been detected by the detection system (col. 3, lines 1-45; Figure 2). Marcus discloses an information display located in the interior or exterior of the vehicle, the display including a CCD camera for using radar to detect rear proximity approaching vehicles (col. 5, lines 29-57). Since Gauthier, Schofield and Marcus disclose radar detecting devices mounted in vehicles as well as displays connected to the radar detecting devices, it

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would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of a radar display attached to the interior of the vehicle, as disclosed by Marcus, with the systems of Gauthier and Schofield, to maximize both forward and rearward fields of view to the driver and other drivers on the road and provide a display that will be protected by being placed on the inside of the vehicle.

6. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gauthier in view of Schwartz et al. as applied to claim 1 above, and further in view of Dupay et al. (US Pat. 6,252,497 B1)

In reference to claims 17, 18, although neither Gauthier nor Schwartz disclose the claimed attachment means comprising a bracket or fasteners to couple the side object detection to a vehicle window, he does disclose he does disclose a mirror display system 40, on the outside side rearview mirror, is connected to the ultrasonic transceivers 60 via cables 66 (col. 6, lines 5-68, Figure 1). Dupay discloses transmitter/receiver components of the coupling alignment warning system (CAWS) 10 for aligning a towing unit with a towed unit by detecting ambient and reflected laser light in the system. In particular, the transmitter includes a laser light source 12 (preferably, a laser diode) that is mounted in an adjustable support 14 that is, in turn, attached to the interior of a rugged enclosure 64 (col. 4, lines 26-45). Although the indicator is preferably mounted to the exterior mirror of the towing unit, it may also be mounted within the cab or any convenient place in which it may be monitored by the operator of the vehicle. Since Gauthier, Schwartz, and Dupay disclose vehicle systems including radar detecting devices that are



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mounted to a vehicle, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of placing the object detecting device to a window and even the interior window of the vehicle, as a means for protecting the radar detecting device from outside weather and/or theft while also allowing the driver to manually control the portable device while driving.

7. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davetta W. Goins whose telephone number is 571-272-2957. The examiner can normally be reached on Mon-Fri with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D.W.G.

April 1, 2005

Davetta W. Goins  
Primary Examiner  
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